

Patent Claims

1. A semiconductor relay having an essentially cuboid housing (20) which has an attachment face (3) as well as four side surfaces (4, 5, 6, 7), which are arranged at right angles to this, and a front face (8) which is opposite the attachment face (3), as connecting faces (4, 5, 6, 7, 8), characterized in that at least one electrical connection element (11, 12) and at least one mechanical connection element (19, 24) are provided on a number of connecting faces (4, 5, 6, 7, 8) overall for connection of a functional module (1) which can be connected to the housing (20).
2. The semiconductor relay as claimed in claim 1, characterized by a functional module (1) which is connected to two connecting faces (4, 5, 6, 7, 8).
3. The semiconductor relay as claimed in claim 1 or 2, characterized in that the functional module (1) is provided for load circuit monitoring.
4. The semiconductor relay as claimed in one of claims 1 to 3, characterized in that the functional module (1) is provided for power control in the load circuit.
5. The semiconductor relay as claimed in one of claims 1 to 4, characterized in that the functional module (1) can be driven by means of an analogue signal.

6. The semiconductor relay as claimed in one of claims 1 to 5,
characterized in that the functional module (1) is provided for
current measurement.

7. The semiconductor relay as claimed in one of claims 1 to 6,

characterized in that the functional module (1) is provided for analogue/digital signal conversion.

8. The semiconductor relay as claimed in one of claims 1 to 7,
characterized in that the functional module (1) can be connected to the housing (20) without the use of any tools.

9. The semiconductor relay as claimed in claim 8,
characterized in that the functional module (1) can be snapped onto the housing (20).

10. The semiconductor relay as claimed in one of claims 1 to 9,
characterized in that a plurality of functional modules (1) can be connected to the housing (20).

11. The semiconductor relay as claimed in one of claims 1 to 10,
characterized in that the functional module (1) has a base face (16) which is aligned with the attachment face (3) of the housing (20).

12. The semiconductor relay as claimed in one of claims 1 to 11,
characterized in that the functional module (1) has two attachment limbs (25), which are arranged on both sides of an opening (26) in the housing (20) and are each aligned parallel to one side surface (4, 5, 6, 7).